

Notice of Allowability

Application No.

09/880,453

Examiner

Dac V. Ha

Applicant(s)

TANNO ET AL.

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2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 02/04/05.
2. ☒ The allowed claim(s) is/are 1 and 4-27.
3. ☒ The drawings filed on 02/04/05 and 06/31/01 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 02/15/05, 12/10/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Adrian J. Lee (Reg. 42,785) on 05/12/05.

The application has been amended as follows:

Claim 6, line 2, "claim 2" has been changed to --claim 1--

Claim 7, line 2, "claim 2" has been changed to --claim 1--

2. The following is an examiner's statement of reasons for allowance:

Applicants have cancelled claims 2-3 and amended claims 1, 4-27. Particularly, claims 10, 23, 24, 25, 27 have been amended to be in independent form in accordance with the office action dated 09/07/04. Independent claim 1 has been amended to further clarify the claimed invention. Upon further consideration and comparison with prior art of record, the examiner agrees applicants' argument in the REMARKS on pages 13-16 of the amendment filed on 02/04/05. That is prior art of record, taking individually or collectively, fails to fairly teach method of synchronization of a mobile station based on the correlation including a second step of "averaging the first powerized correlation values", as claimed in independent claim 1; "wherein when the synchronization channel is estimated to be transmitted alternately from two antennas, the averaging step averages second correlation values that are estimated to be transmitted from a same

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antenna, and outputs second averaged correlation values; and the averaged correlation values to output second powerizing step detects power of the second powerized correlation values" in independent claim 10; "wherein the averaging period is varied in response to a moving speed of the mobile station" in independent claim 23; "wherein the averaging step carries out the averaging over a averaging period that is varied depending on a state of the mobile station, which includes a power up state, an idle state and a traffic state of the mobile station" in independent claim 24; "outputting, when the mobile station is at power up, power averaged correlation values by detecting powers of the correlation values of the synchronization channel first, and by averaging the powers thereafter, wherein the peak detecting step detects a peak of the power averaged correlation values" in independent claim 25; "outputting, when the mobile station is in one of the power up and idle state, power averaged correlation values by detecting powers of the correlation values of the synchronization channel first, and by averaging the powers thereafter, wherein the peak detecting step detects a peak of the power averaged correlation values" in independent claim 27 (claims 4-9, 11-22, 26 depend therefrom). Thus, claims 1, 4-27 are found to be novel and unobvious over prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dac V. Ha whose telephone number is 571-272-3040.

The examiner can normally be reached on 5/4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Dac V. Ha', with a long horizontal line extending to the right.

Dac V. Ha
Primary Examiner
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